Phase I ESA
Planters Oil Mill
1004 Cokey Road
Rocky Mount, North Carolina

H&H Job No. CRM-001

October 10, 2007

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Phase I Environmental Site Assessment
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1.0 Findings, Opinions, and Conclusions

Hart & Hickman, PC (H&H) has performed a Phase I Environmental Site Assessment (ESA) of a 7.3-acre parcel located at 1004 Cokey Road in Rocky Mount, Edgecombe County, North Carolina in conformance with the scope and limitations of ASTM Practice E-1527. Any exceptions to, or deletions from, this practice are described in this report. This assessment was conducted on behalf of the City of Rocky Mount under the City's U.S. Environmental Protection Agency (EPA) Region 4 Brownfield Assessment Grant BF-96432205-0.

A brief summary of our findings is described below:

- **Current Site Conditions**

  The subject site consists of a grassy field with structures around its periphery including three large capacity grain tanks and associated grain elevators in the southeastern corner, one large former processed oil tank in the central portion of the site, two corrugated metal warehouse buildings, a wooden storage shed, and a concrete block office building in the northwestern corner.

  The site is currently vacant. The site was recently acquired by the City of Rocky Mount. Remaining site buildings will be demolished by the City in the near future.

- **Historical Information**

  The site was developed prior to 1907 and was operated from that time through 1983 as the Planters Cotton Oil & Fertilizer Company or Planters Oil Mill, Inc. The mill produced

cottonseed oil and later soybean oil, and fertilizer. Oil was extracted manually from the cottonseed or soybeans until about 1959 or 1960 when the owners switched to a solvent extraction process using hexane.

A major fire in January 1983 destroyed several on-site buildings in the oil processing facility, including the hull house where the fire is believed to have originated, the hexane solvent tower, and neighboring structures. Hexane was reportedly released from the hexane storage tank during the fire and from handling at the site over the 20+ year period it was in use.

Recognized Environmental Conditions

The following recognized environmental conditions (RECs) were identified during this Phase I ESA:

- The release of hexane, a highly flammable liquid, to shallow soil and potentially to shallow ground water in the area under the former hull house, solvent extraction tower, and hexane UST.
- The potential release of petroleum compounds from five on-site petroleum USTs to shallow soil and ground water at the site.
- The manufacture and potential release of fertilizer compounds, which can contain elevated metals, to the shallow soil.
- The on-site use of parathion and potentially other organophosphate or organochlorine pesticides and its potential impact on site soil.
- Certain site structures were found to contain asbestos containing material.

Potential Environmental Conditions

Although not identified as RECs, the following potential area of concern (PEC) was identified:

- Potential impact from petroleum compounds in ground water from three gasoline USTs closed in place in 1990 at the former gasoline service station at 806 Cokey Road (Turnage Property). This property is located approximately 400 feet north (potentially up gradient) of the site. This site is identified as a State Leaking Underground Storage Tank (LUST) site with soil contamination stemming from Total Petroleum Hydrocarbons (TPH) as gasoline up to 3,500 milligrams per kilogram (mg/kg). Ground water was not sampled and analyzed as part of the tank closure.

Recommendations

Based on the Phase I ESA findings, H&H recommends the following:

- Remove and properly dispose of asbestos materials and remaining drums and debris at the site.
- Complete a Phase II ESA to characterize areas identified as historic RECs and PECs. The Phase II ESA should include:
    - a geophysical survey using electro-magnetic techniques to identify remaining USTs and associated subsurface piping and subsurface piping from the former boiler room to the oil processing areas
    - the collection and chemical analysis of soil and groundwater samples to evaluate potential impacts to shallow soil and ground water from on-site use and storage of hexane and other VOCs, petroleum compounds, and pesticides; the manufacture and potential release of fertilizer compounds; and potential off-site sources of contamination to shallow ground water.